UNITED STATES PATENT AND TRADEMARK OFFICE

APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/664,449	09/20/2003	Chen-Yu Huang	CHA920030020US1	4525

7590 10/25/2007		EXAMINER
James E. Nurray		SAINT CYR, LEONARD
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ART UNIT	PAPER NUMBER
2626	

Poughkeepsie, NY 12601

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Please find below and/or attached an Office communication concerning this application or proceeding.

The time period for reply, if any, is set in the attached communication.

	Application No.	Applicant(s)
Office Action Summary	10/664,449	HUANG ET AL.
	Examiner	Art Unit	
	Leonard Saint-Cyr	2626	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE <u>3</u> MONTH(S) OR THIRTY (30) DAYS, WHICHEVER IS LONGER, FROM THE MAILING DATE OF THIS COMMUNICATION.
- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

1)☒ Responsive to communication(s) filed on <u>08/08/07</u>.

2a)☒ This action is **FINAL**.   2b)☐ This action is non-final.

3)☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

4)☒ Claim(s) <u>1-16</u> is/are pending in the application.

    4a) Of the above claim(s) _____ is/are withdrawn from consideration.

5)☐ Claim(s) _____ is/are allowed.

6)☒ Claim(s) <u>1-16</u> is/are rejected.

7)☐ Claim(s) _____ is/are objected to.

8)☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

9)☐ The specification is objected to by the Examiner.

10)☐ The drawing(s) filed on _____ is/are: a)☐ accepted or b)☐ objected to by the Examiner.

    Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).

    Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).

11)☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

Priority under 35 U.S.C. § 119

12)☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).

    a)☐ All b)☐ Some * c)☐ None of:

      1.☐ Certified copies of the priority documents have been received.

      2.☐ Certified copies of the priority documents have been received in Application No. _____.

      3.☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

    * See the attached detailed Office action for a list of the certified copies not received.

Attachment(s)

1)☐ Notice of References Cited (PTO-892)

2)☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)

3)☐ Information Disclosure Statement(s) (PTO/SB/08)
    Paper No(s)/Mail Date _____.

4)☐ Interview Summary (PTO-413)
    Paper No(s)/Mail Date _____.

5)☐ Notice of Informal Patent Application

6)☐ Other: _____.

DETAILED ACTION

Response to Arguments

1.   Applicant's arguments filed 08/08/07 have been fully considered but they are not persuasive.

2.   Applicant argues that Omoigui does not teach automatically modifying users queries to expand a search (Amendment, page 9).

The examiner disagrees; Omoigui teaches that agents representing queries that are used with server-side and client-side applications to enable efficient, inferential-based queries producing semantically relevant information. Once the user reaches a node in the network, the user has many semantic means of navigating dynamically and automatically using context relatedness to smart agencies and agents (paragraph 74, lines 12 – 15; paragraph 217, lines 24 – 27). Navigating dynamically and automatically using context relatedness to produce semantically relevant information implies automatically modifying users queries to expand a search, since navigation is done automatically.

3.   Applicant argues that Omoigui does not teach increasing the terms in a semantic dictionary; nor ranking results (Amendment, page 9).

The examiner disagrees, Omoigui teaches adding automatically agent into Joe's Semantic environment. The information agent performs implicit queries and provides recommendations that include this agent. The result items are in order to determine the

ranking of the results (paragraph 1112, lines 1 – 3; paragraph 1319, lines 4 – 8).

Adding agent to a semantic environment and ranking the results imply increasing the

terms in a semantic dictionary; and ranking results, since agents are considered as

terms.

Specification

4.   The specification is objected to as failing to provide proper antecedent basis for

the claimed subject matter. Correction of the following is required. Claims 9 – 16

disclose "computer program on a computer usable medium", but there is no definition or

explanation in the specification of the instant application as to what type the medium is

used to store the computer program.

Claim Rejections - 35 USC § 102

5.   The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that

form the basis for the rejections under this section made in this Office action:

> A person shall be entitled to a patent unless –
>
> (e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

6.   Claims 1 – 16 are rejected under 35 U.S.C. 102(e) as being anticipated by

Omoigui (US PAP 2003/0126136).

As per claims 1, and 9, Omoigui teaches a self-enhancing search system comprising:

a semantic taxonomy containing semantic nodes in a hierarchical structure (paragraph 705; paragraph 217, line 8);

a search system text analyzer that periodically looks through documents and identifies semantic node terms in the semantic taxonomy applicable to terms used in the document ("document as a tree of nodes"; paragraph 317, lines 5 – 7; paragraph 1230);

a semantic binder attaching the documents to a semantic node term applicable to terms used in the documents ("testing whether or not a node matches a pattern"; paragraph 166; paragraph 317, lines 1 – 7; paragraph 311, lines 1 - 3); and

relevant document finder which automatically enhances a user's query with a semantic node term applicable to the users query and based on the enhanced query including the semantic node term locates documents which do not contain a match for the users query but contain other search terms that belong to the semantic node applicable to a user's search ("once the user reaches a node in the network, the user has many semantic means of navigating dynamically and automatically using context relatedness to smart agencies and agents"; paragraph 510, lines 1 –5; paragraph 74, lines 12 – 15; paragraph 217, lines 24 – 27).

As per claims 2, and 10, Omoigui further discloses the enhanced search query automatically includes both "the user's search query" OR "the semantic node" to

automatically without user intervention locate documents that contain a match for either

the users search query term or related to the semantic node ("the user has many

semantic means of navigating dynamically and automatically using context relatedness

to smart agencies and agents"; paragraph 466, line 12; paragraph 217, lines 24 – 27).

As per claims 3, and 11, Omoigui further discloses a semantic dictionary which

defines user query terms in accordance with the semantic nodes in a semantic

dictionary ("invokes the query onto the database that hosts the semantic metadata";

paragraph 638, lines 12 – 14).

As per claims 4, and 12, Omoigui further discloses a semantic dictionary builder

which systematically examines the system log off line new queries to increase the terms

in the semantic dictionary (" automatically adds the agent into Joe's semantic

environment that performs implicit queries"; paragraph 1319, lines 1 – 7).

As per claims 5, and 13, Omoigui further discloses ranking the results of

searches using the enhanced queries to place terms in the semantic dictionary in order

of most often used query terms ("ranked by relevance"; paragraph 1319, lines 1 – 7;

paragraph 1112, lines 1 – 3).

As per claims 6, and 14, Omoigui further discloses that the semantic binder

includes:

a sub-module that identifies domain specific terms ("domain specific semantic

information") in a given query, using domain specific glossary (paragraph 71);

a submodule that finds synonyms ("same meaning") and related terms for the

identified terms, using domain specific thesaurus (paragraph 19, lines 13 - 15);

a submodule that finds other statistically close terms ("new semantic links that

are based on probabilistic inferences"; paragraph 623, lines 1 – 3); and

a submodule that identifies relevant domain specific categories for the identified

terms, using domain specific ontology (paragraph 71, lines 17 –21; paragraph 258).

As per claims 7, and 15, Omoigui further discloses a submodule that binds

queries in the identified semantic taxonomy categories, using the results of the text

analyzer ("ontology and categories corresponding to taxonomy for each semantic

domain ... responds to semantic queries"; paragraph 670, lines 8 – 11).

As per claims 8, and 16, Omoigui further discloses a submodule that adds new

doc-query links to the meta-data of the corresponding textual index entries to link the

documents to the semantic taxonomy categories ("adding, removing and updating

entries in the semantic metadata store"; paragraph 248; paragraph 269; paragraph 670,

lines 8 – 11; paragraph 582).

Conclusion

7.   **THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time

policy as set forth in 37 CFR 1.136(a).

A shortened statutory period for reply to this final action is set to expire THREE

MONTHS from the mailing date of this action. In the event a first reply is filed within

TWO MONTHS of the mailing date of this final action and the advisory action is not

mailed until after the end of the THREE-MONTH shortened statutory period, then the

shortened statutory period will expire on the date the advisory action is mailed, and any

extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of

the advisory action. In no event, however, will the statutory period for reply expire later

than SIX MONTHS from the mailing date of this final action.

8.   Any inquiry concerning this communication or earlier communications from the

examiner should be directed to Leonard Saint-Cyr whose telephone number is (571)

272-4247. The examiner can normally be reached on Mon- Friday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's

supervisor, Richemond Dorvil can be reached on (571) 272-7602. The fax phone

number for the organization where this application or proceeding is assigned is (571)-

273-8300.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see http://pair-direct.uspto.gov. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free). If you would like assistance from a USPTO Customer Service Representative or access to the automated information system, call 800-786-9199 (IN USA OR CANADA) or 571-272-1000.

LS
10/15/07

RICHEMOND DORVIL
SUPERVISORY PATENT EXAMINER